	Primary 10 uM	Secondary/Dosing uM					Target Receptors	Action
	No effect (+++)	50	25	10	5	1	0.1	
7-Chloro-4-hydroxy-2-phenyl-1,8-naphthyridine	-	-	-	-	+++	+++	Adenosine	Antagonist
Domperidone	+/-	+/-	+	++	+++	+++	Dopamine	Antagonist
Ivermectin	-	-	-	-	-	+++	Cholinergic	Modulator
MG 624	-	-	-	-	-	+/-	Cholinergic	Antagonist
Pentamidine isethionate	-	-	-	-	-	-	Glutamate	Antagonist
SB 224289 hydrochloride	-	-	-	+	+++	+++	Serotonin	Antagonist
Terfenadine	-	-	-	-	++	+++	Histamine	Antagonist

Figure 1

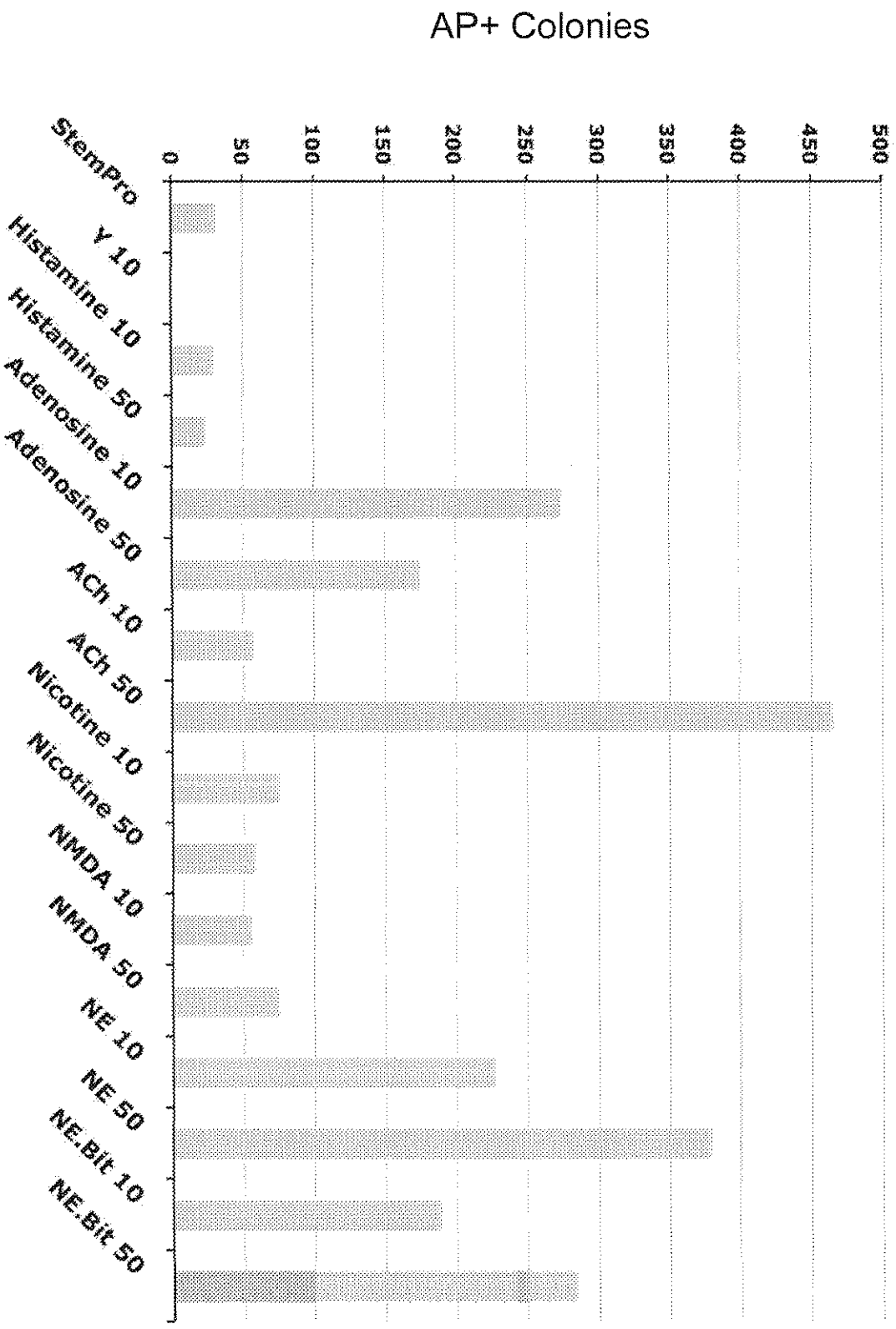

AP+ Colonies
0
50
100
150
200
250
300
350
400
450
500
StemPro
Y 10
Histamine 10
Histamine 50
Adenosine 10
Adenosine 50
ACh 10
ACh 50
Nicotine 10
Nicotine 50
NMDA 10
NMDA 50
NE 10
NE 50
NE-Bit 10
NE-Bit 50

Figure 2

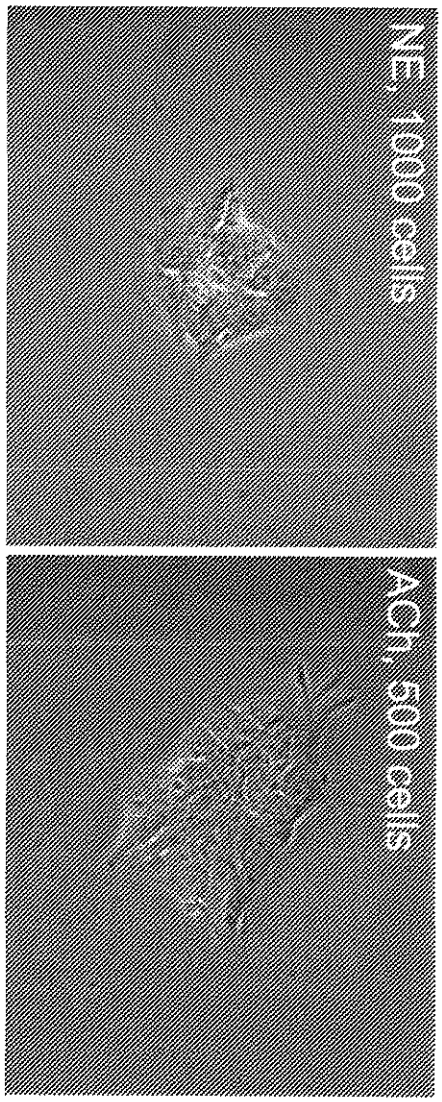

A
AP+ Colonies
600
400
200
0
StemPro
NE
ACh
10000 5000 2000 1000 500 200
Cells Plated
B
NE, 1000 cells
ACh, 500 cells

Figure 3

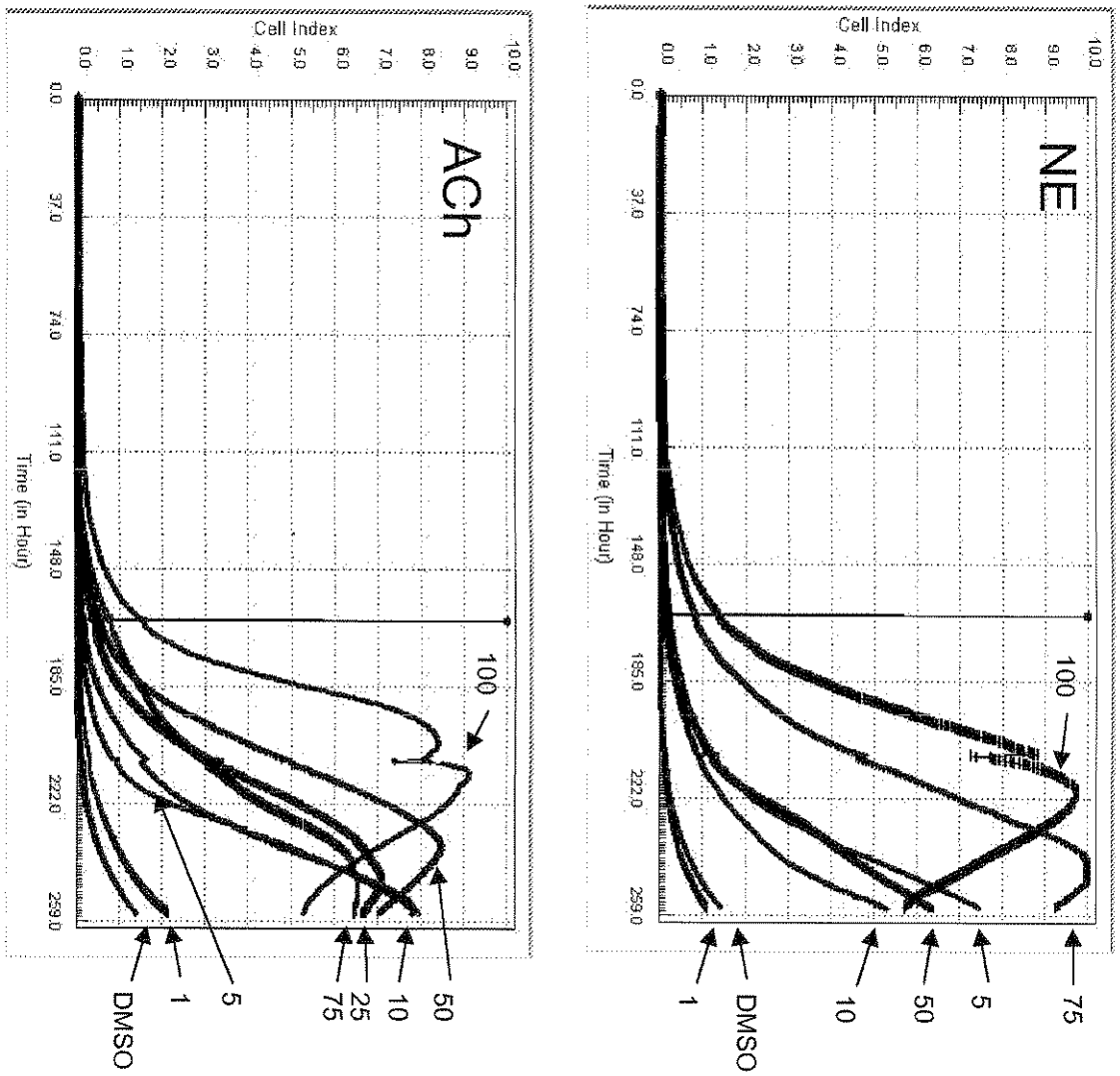
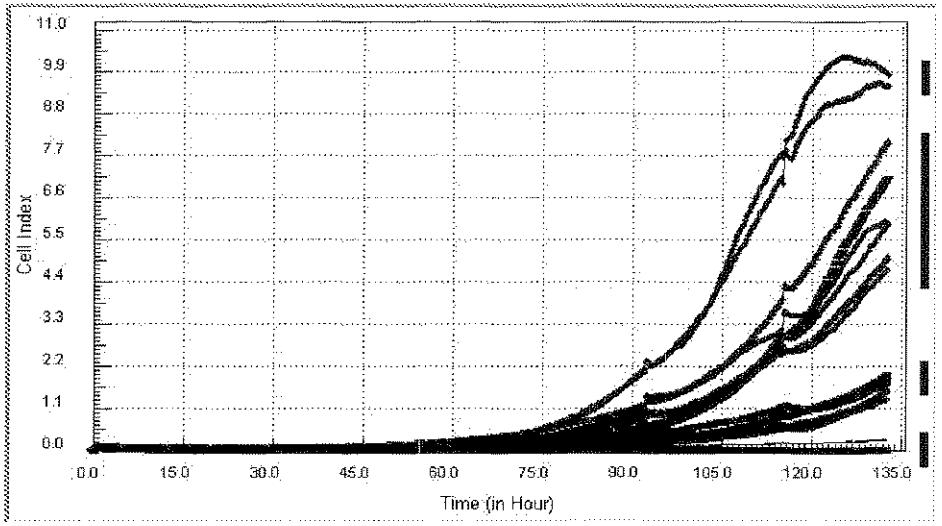

NE
ACh
Cell Index
Time (in Hour)
0.0
37.0
74.0
111.0
148.0
185.0
222.0
259.0
100
75
50
25
10
5
1
DMSO

Figure 4

A

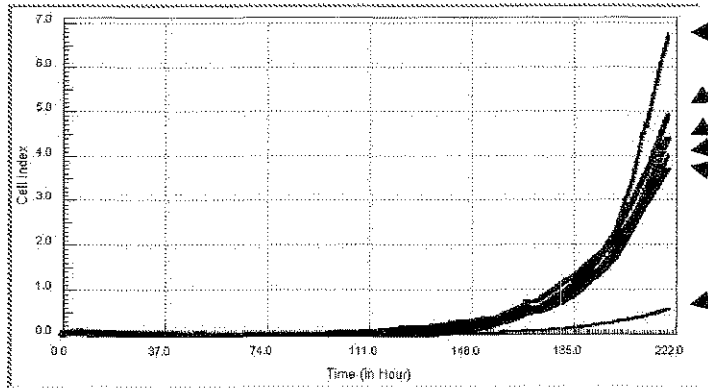


B

	StemPro	NE	ACh	Adenosine	GABA	Y
DMSO	-					
NE	++		+++	+++	++	+
ACh	++	+++		++	++	+
Adenosine	+	+++	++		++	-
GABA	+	++	++	++		-
Y	-	+	+	-	-	

Figure 5

A



B

Name	Class	Action	Selectivity	Description
5'-N-Methyl carboxamidoadenosine	Adenosine	Agonist	A2 > A1	Adenosine receptor agonist with selectivity for A2 over A1
p-Aminoclonidine hydrochloride	Adrenoceptor	Agonist	alpha2	alpha2 Adrenoceptor agonist
L(-)-Norepinephrine bitartrate	Adrenoceptor	Agonist	alpha, beta1	Adrenergic neurotransmitter; vasoconstrictor
Isotharine mesylate	Adrenoceptor	Agonist	beta	beta-Adrenoceptor agonist; bronchodilator
(-)-Isoproterenol hydrochloride	Adrenoceptor	Agonist	beta	beta-Adrenoceptor agonist; increases cytosolic cAMP

C

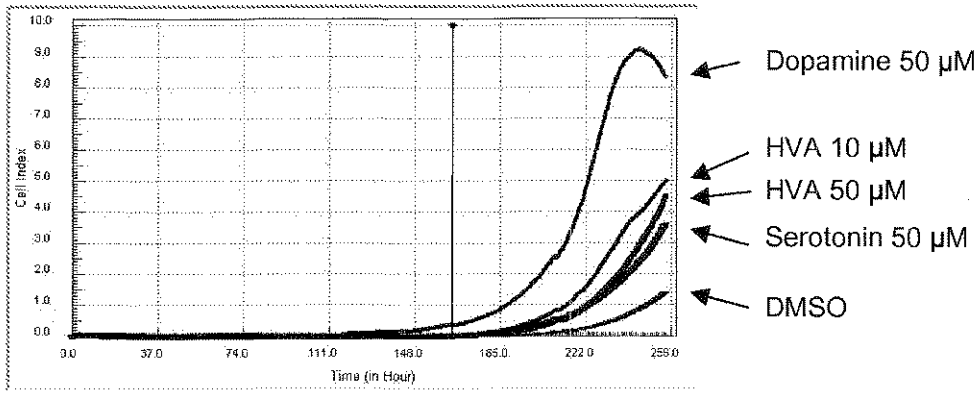


Figure 6

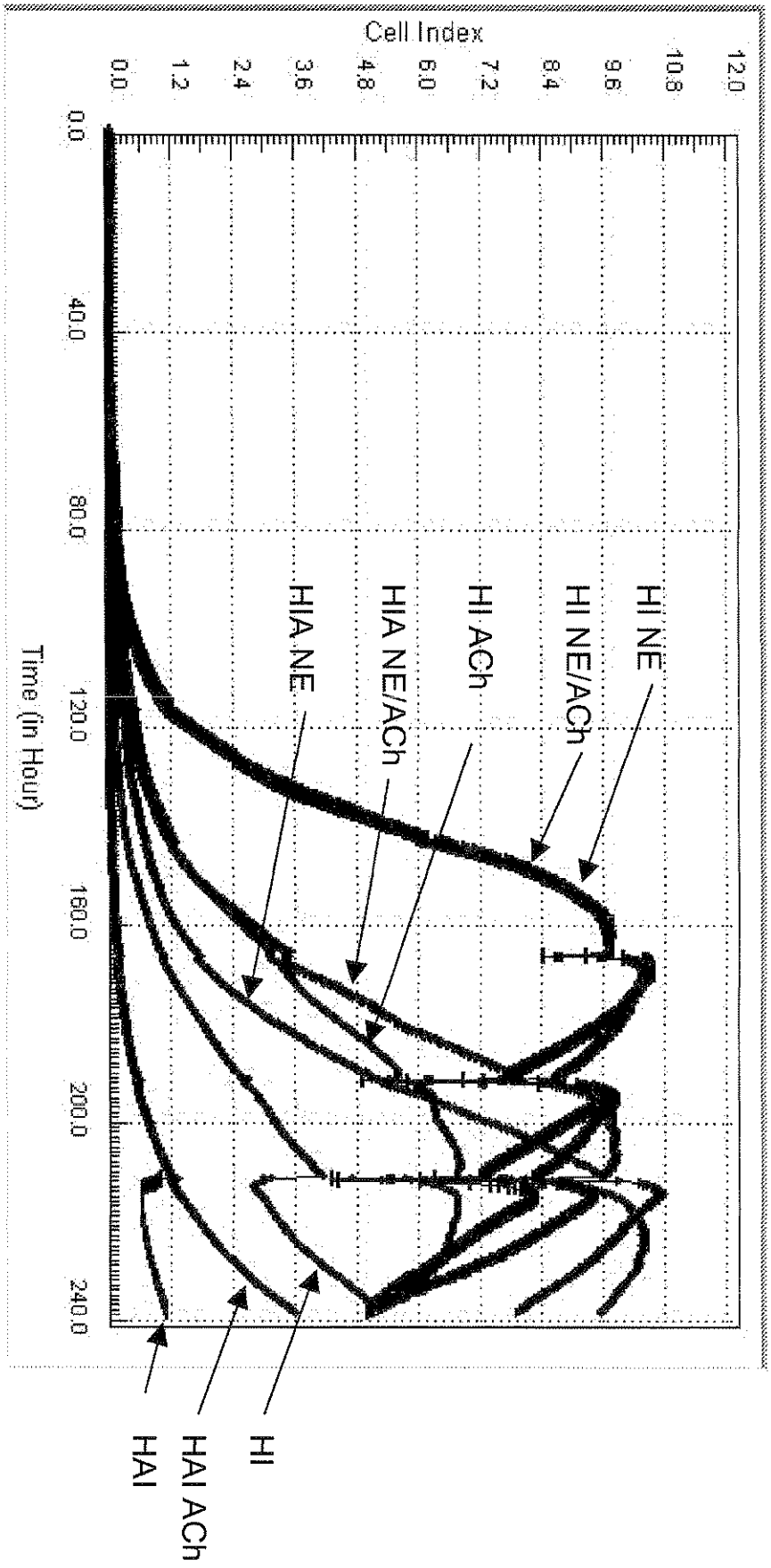

Cell Index
0.0
1.2
2.4
3.6
4.8
6.0
7.2
8.4
9.6
10.8
12.0
Time (in Hour)
0.0
40.0
80.0
120.0
160.0
200.0
240.0
HI NE
HI NE/ACh
HI ACh
HIA NE/ACh
HIA NE
HAI
HAI ACh
HI

Figure 7

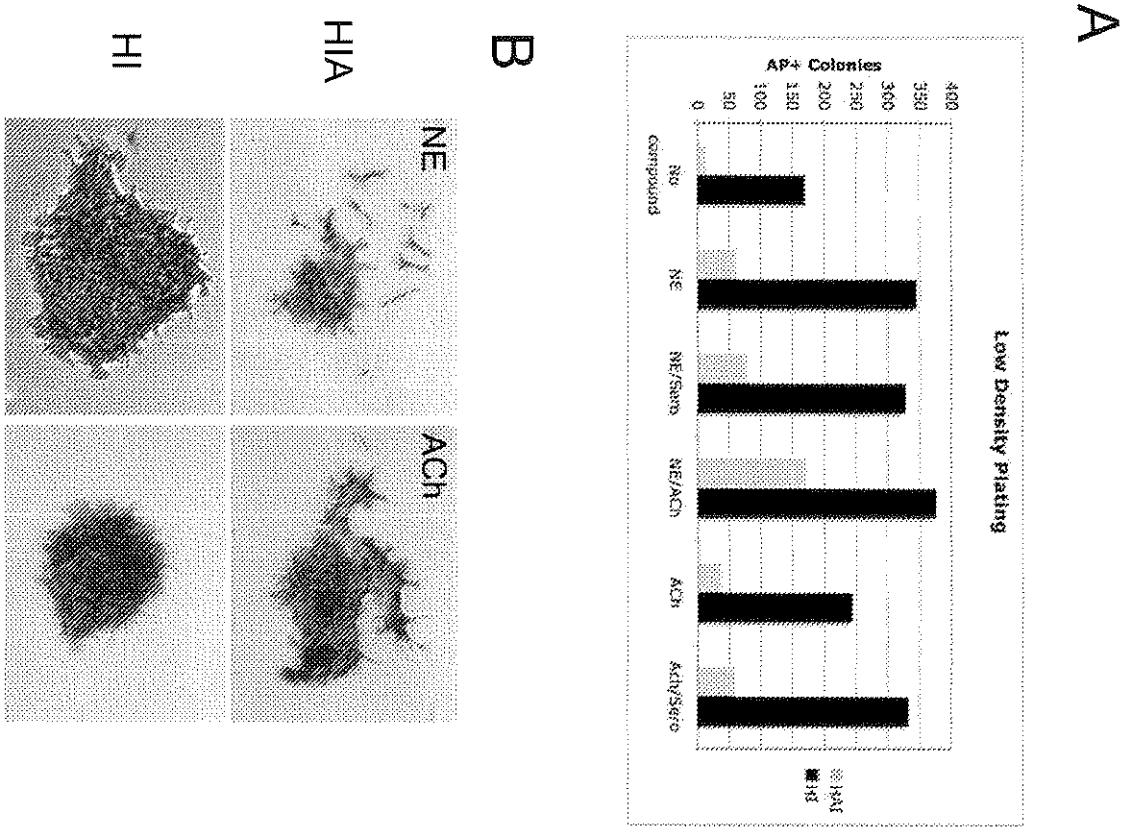
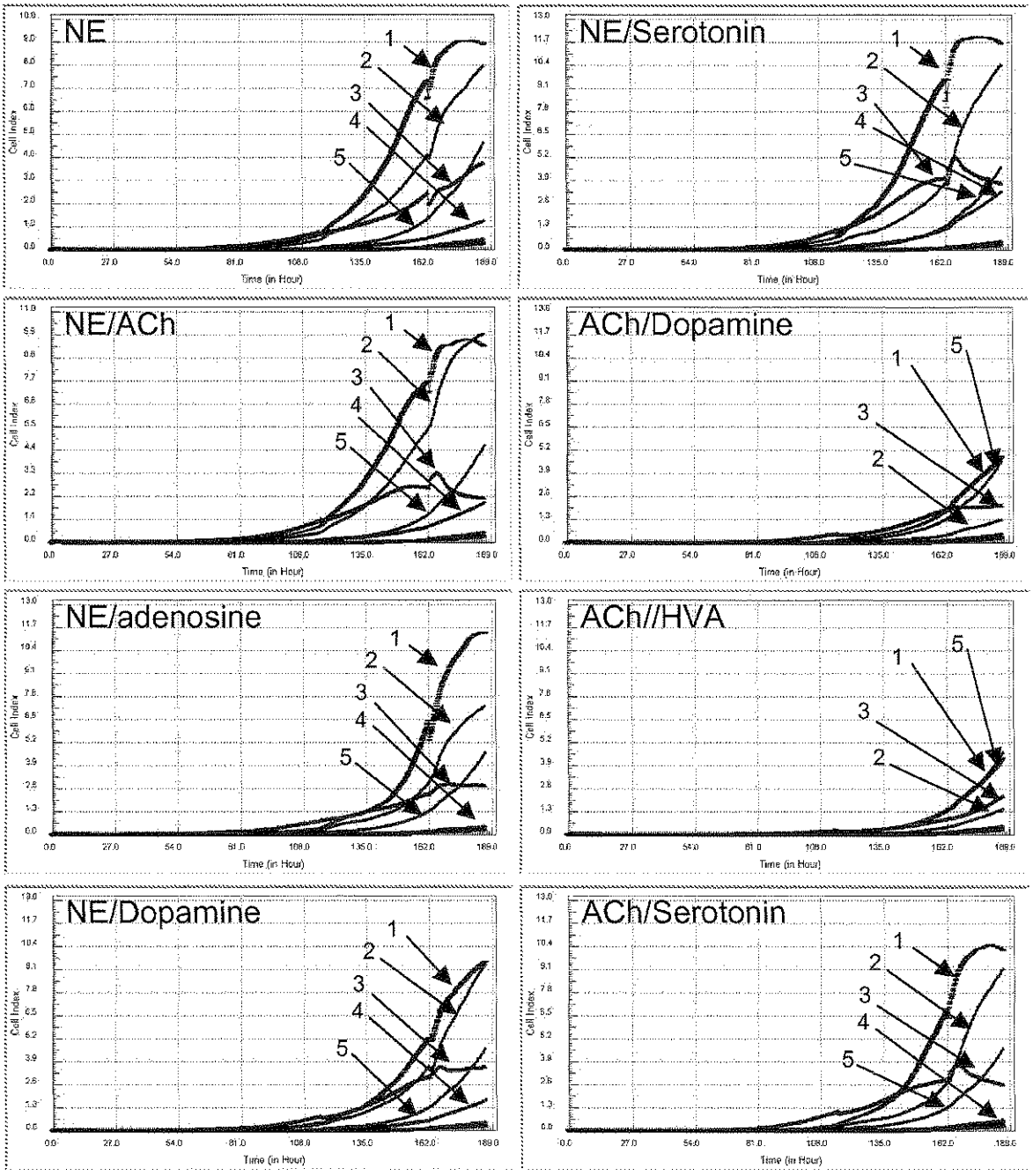

A
Low Density Plating
AP+ Colonies
400
350
300
250
200
150
100
50
0
No compound
NE
NE/Sero
NE/ACh
ACh
Ach/Sero
HIA
HI
B
HIA
NE
ACh
HI

Figure 8



1=HI drug
2=H drug
3=HAI drug
4=I drug
5=HI

Figure 9

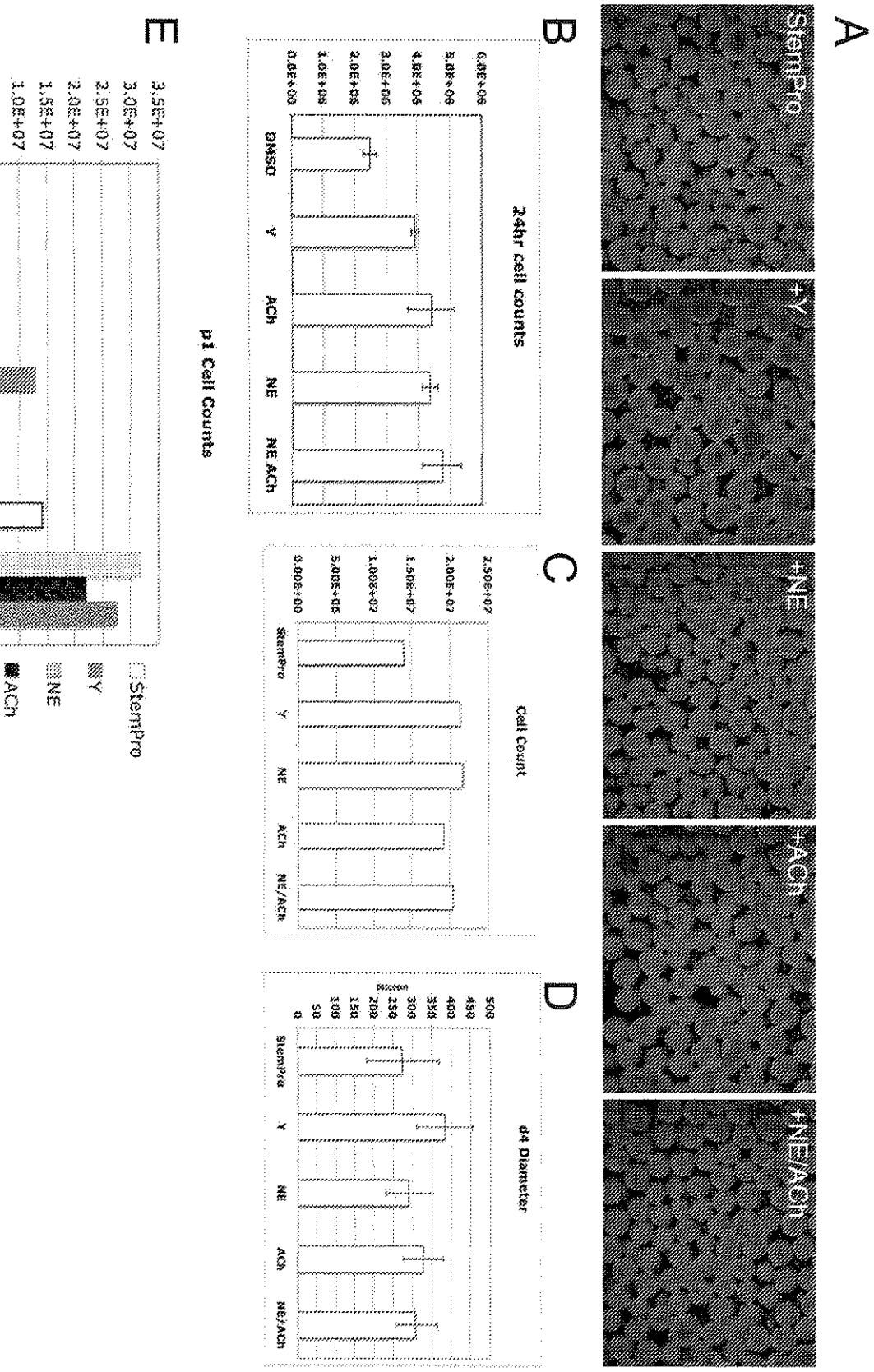
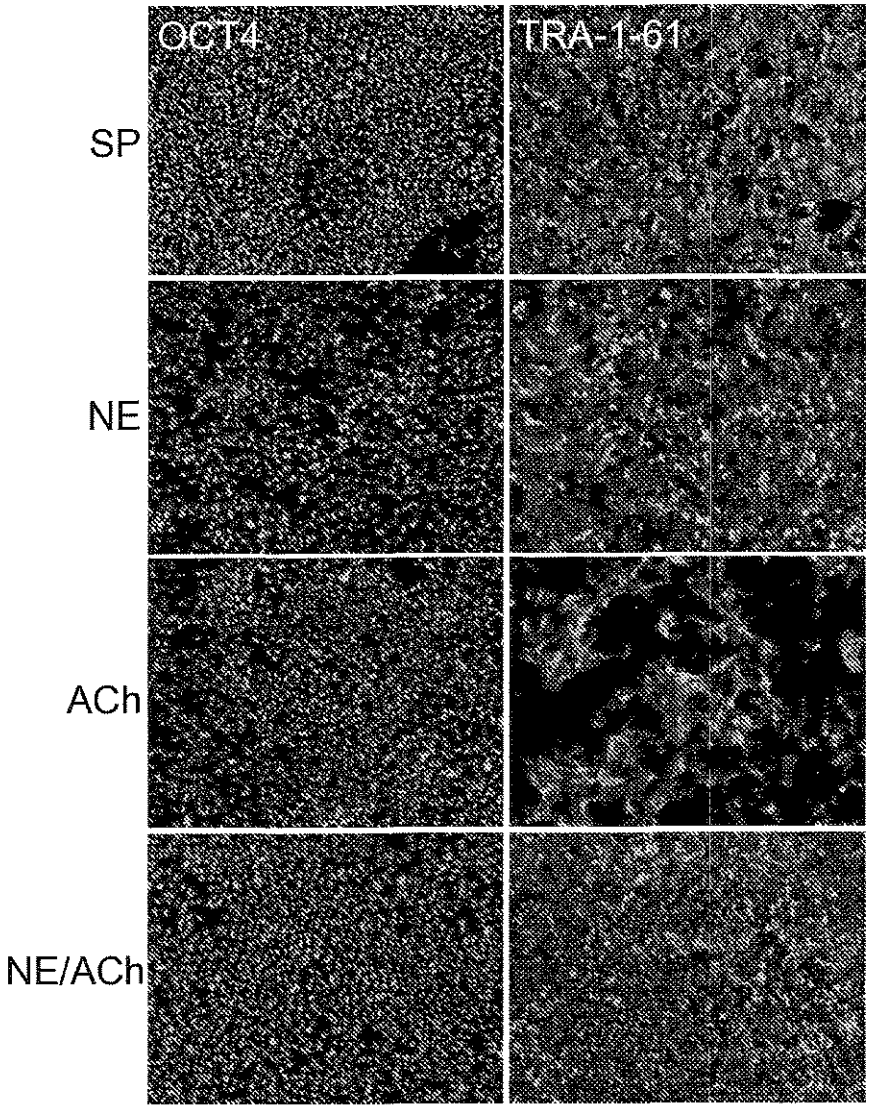
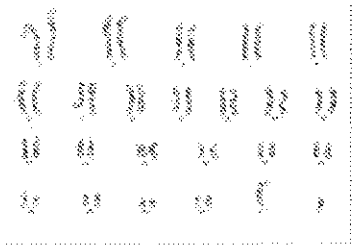

A
StemPro
+Y
+NE
+ACh
+NE/ACh
B
24hr cell counts
6.0E+06
5.0E+06
4.0E+06
3.0E+06
2.0E+06
1.0E+06
0.0E+00
DMSO
Y
ACh
NE
NE ACh
C
Cell Count
2.50E+07
2.00E+07
1.50E+07
1.00E+07
5.00E+06
0.00E+00
StemPro
Y
NE
ACh
NE/ACh
D
d4 Diameter
Microns
500
450
400
350
300
250
200
150
100
50
0
StemPro
Y
NE
ACh
NE/ACh
E
p1 Cell Counts
3.5E+07
3.0E+07
2.5E+07
2.0E+07
1.5E+07
1.0E+07
5.0E+06
0.0E+00
seeded
d3
d6
StemPro
Y
NE
ACh
NE/ACh

Figure 10





46,XY [20/20]



46,XY [19/20]
-21 [1/20]

46,XY [15/20]
47,XY+5 [4/20]
46,XY,t(10;15;19)(q11.2;q15;p13.3),
dup(12)(q13q22),del(17)(q25) [1/20]

46,XY [16/20]
46,XY,del(9)(q10)x2 [1/20]
50,XY,+3,+5,+6,+12 [1/20]
47,XY,+5 [1/20]
45,XY,-20 [1/20]

Figure 11

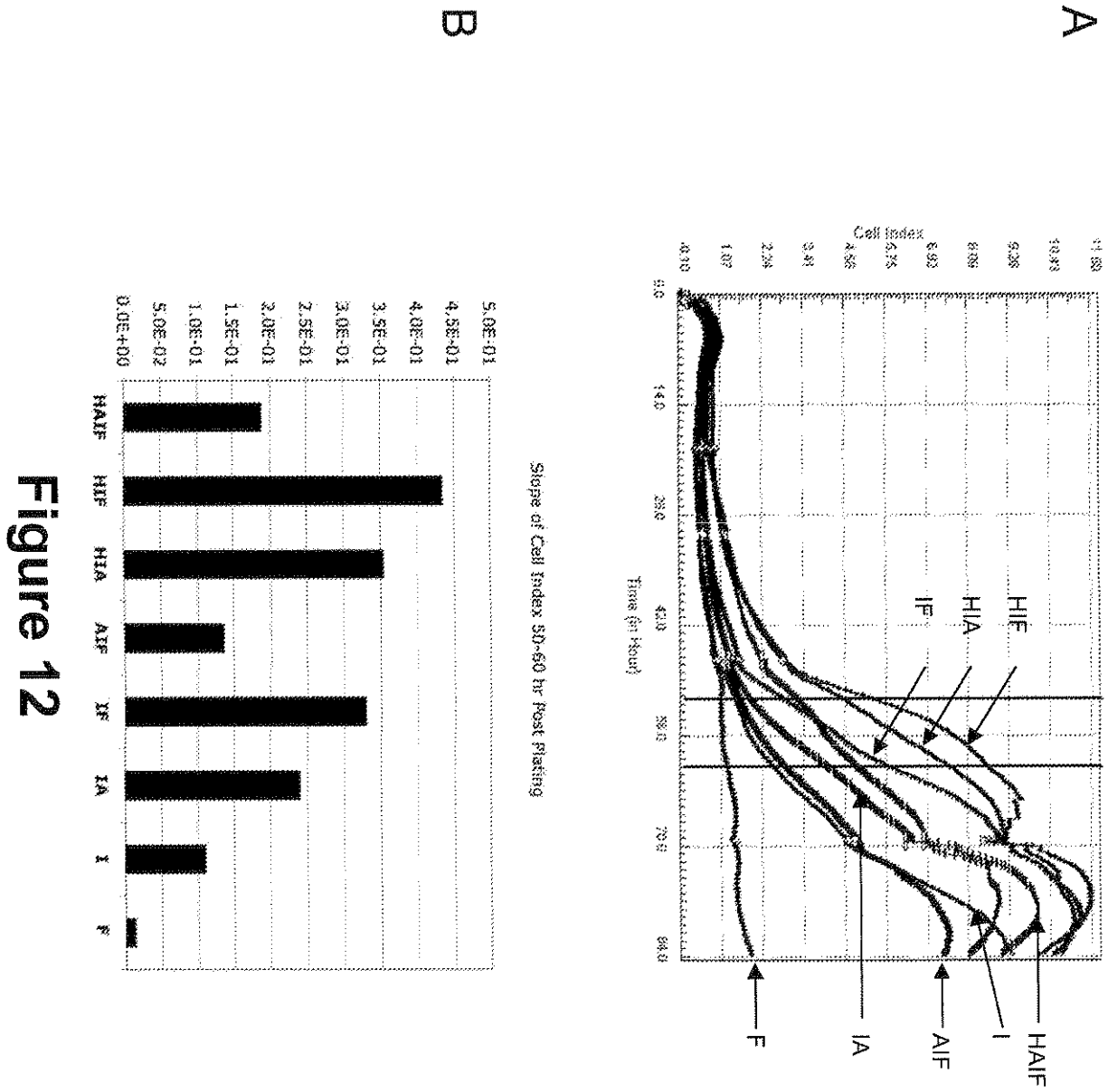

A
B
Cell Index
Time (in Hours)
HIF
HIA
IF
HAIF
AIF
I
IA
F
Slope of Cell Index 50-60 hr Post Plating
5.0E-01
4.5E-01
4.0E-01
3.5E-01
3.0E-01
2.5E-01
2.0E-01
1.5E-01
1.0E-01
5.0E-02
0.0E+00
HAIF
HIF
HIA
AIF
IF
IA
I
F

Figure 12

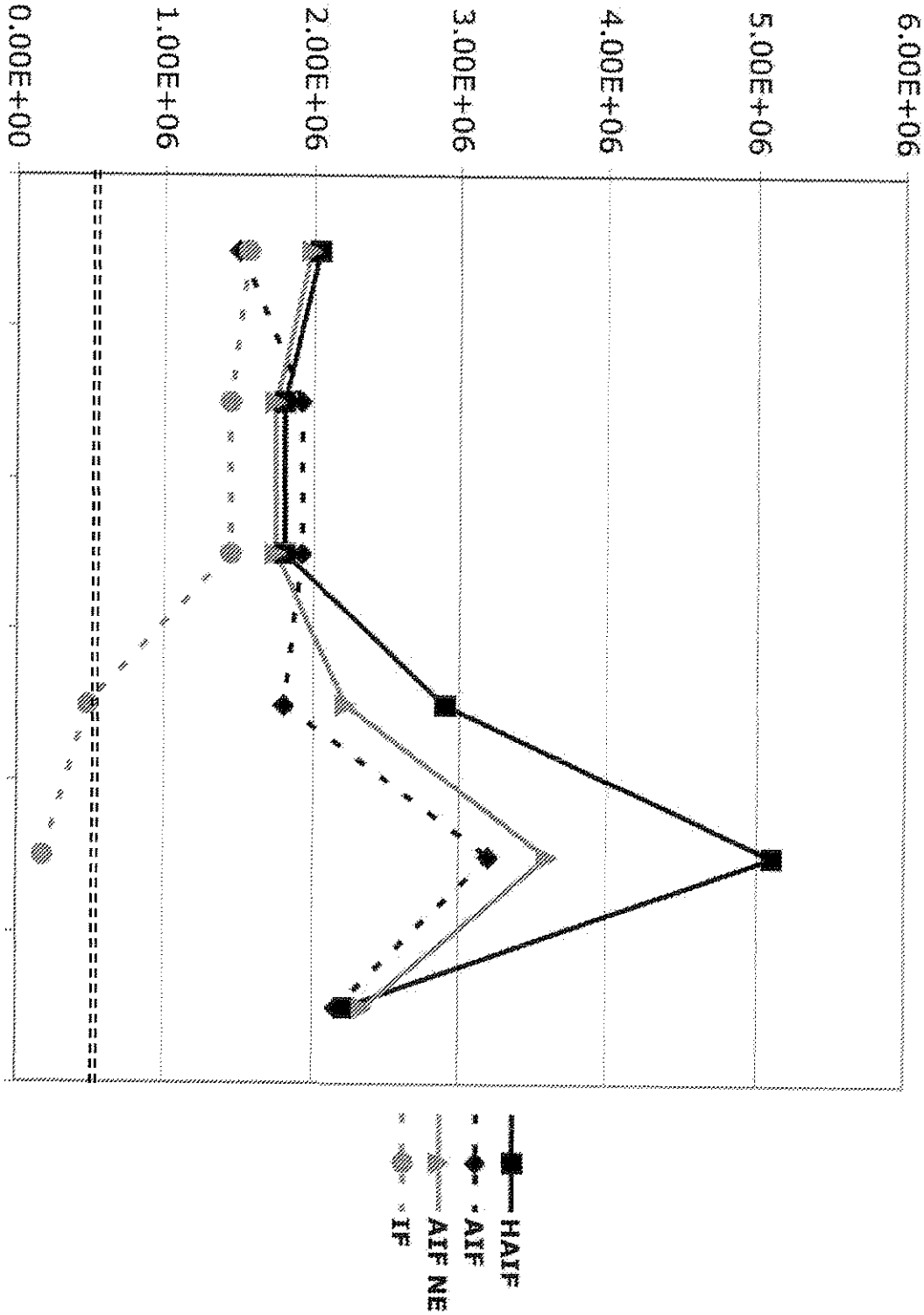

6.00E+06
5.00E+06
4.00E+06
3.00E+06
2.00E+06
1.00E+06
0.00E+00
p0
p1
p2
p3
p4
p5
HAIF
AIF
AIF NE
IF

Figure 13

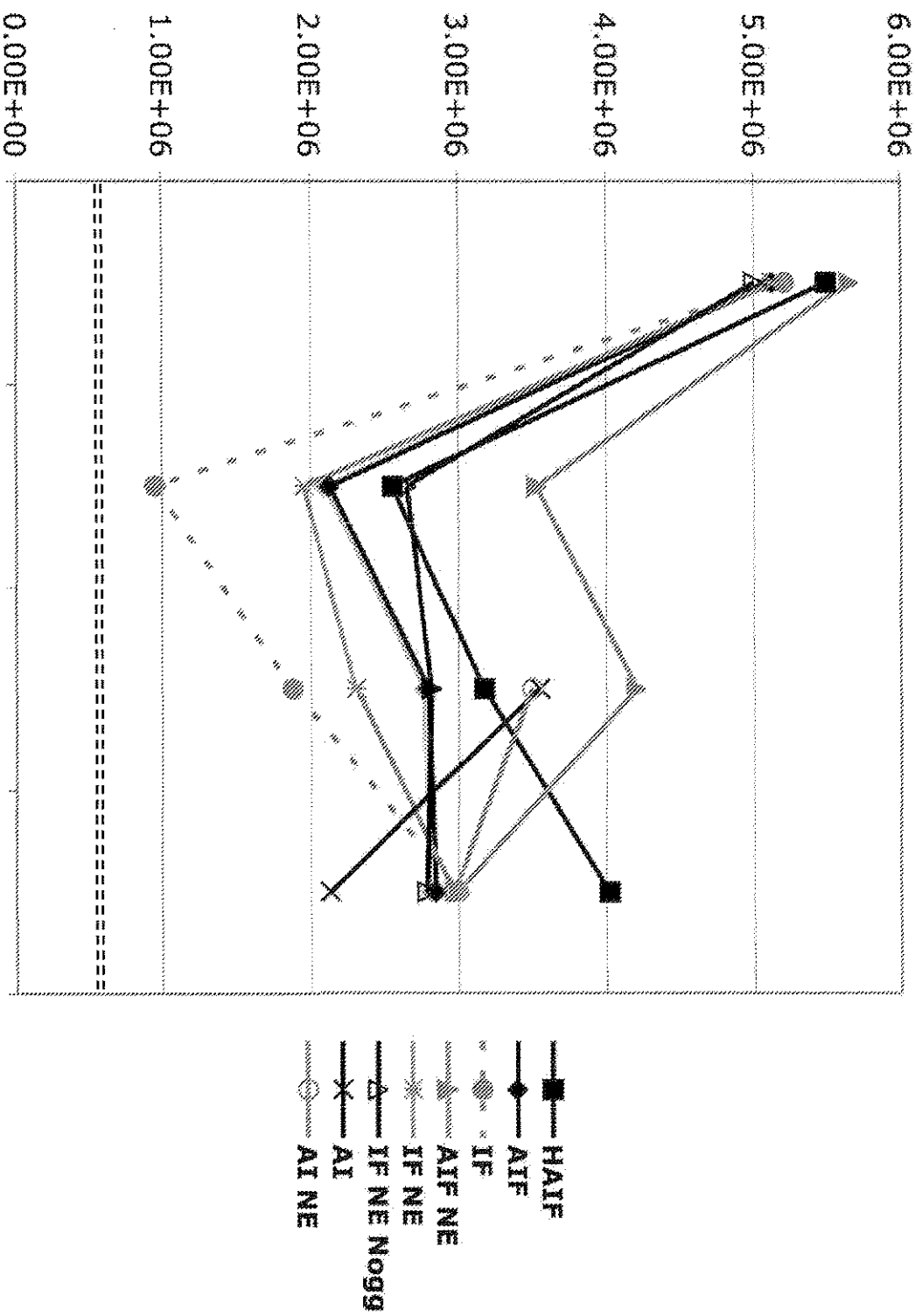

6.00E+06
5.00E+06
4.00E+06
3.00E+06
2.00E+06
1.00E+06
0.00E+00
p0
p1
p3
p4
HAIF
AIF
IF
AIF NE
IF NE
IF NE Nogg
AI
AI NE

Figure 14

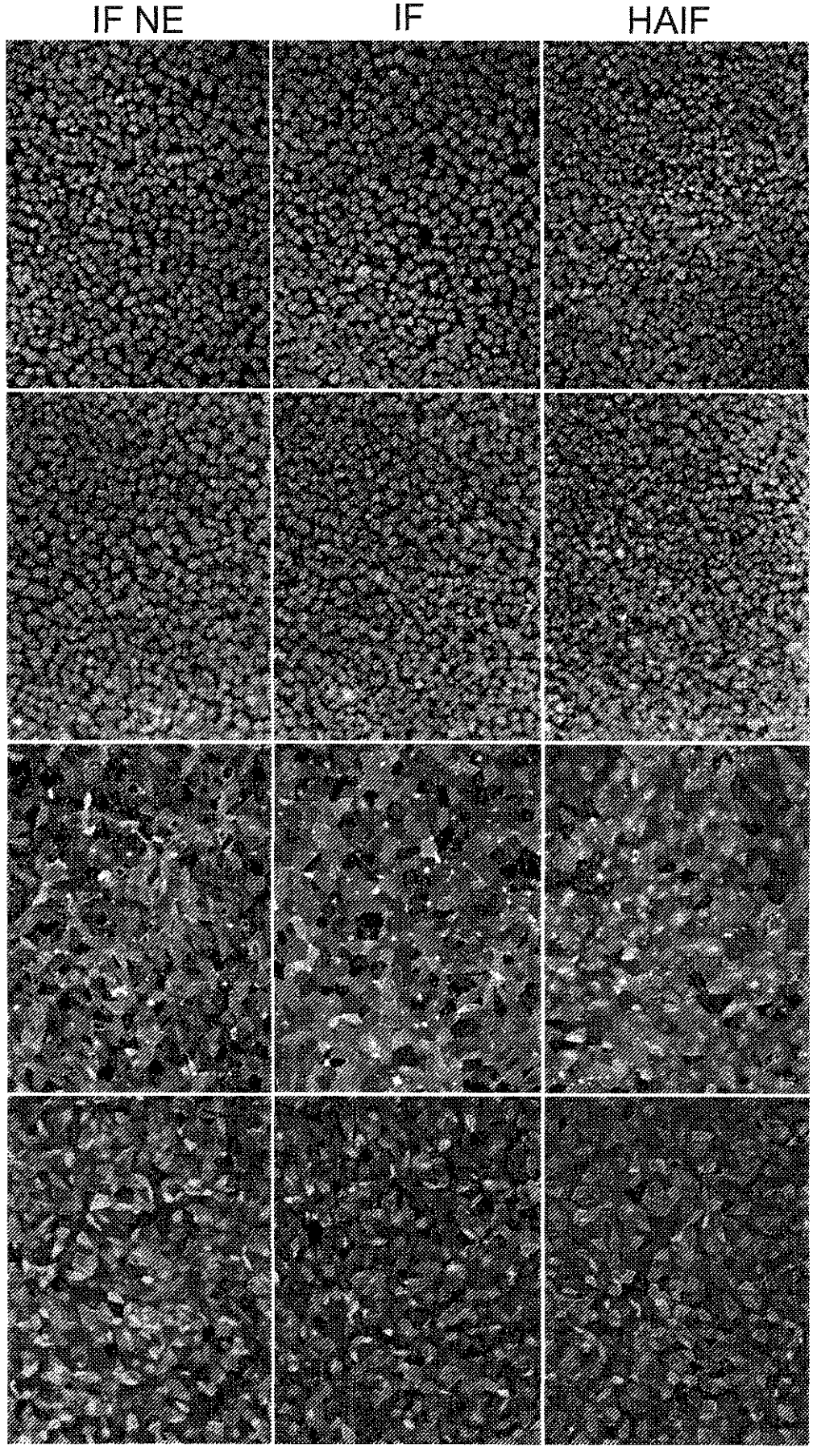


Figure 15

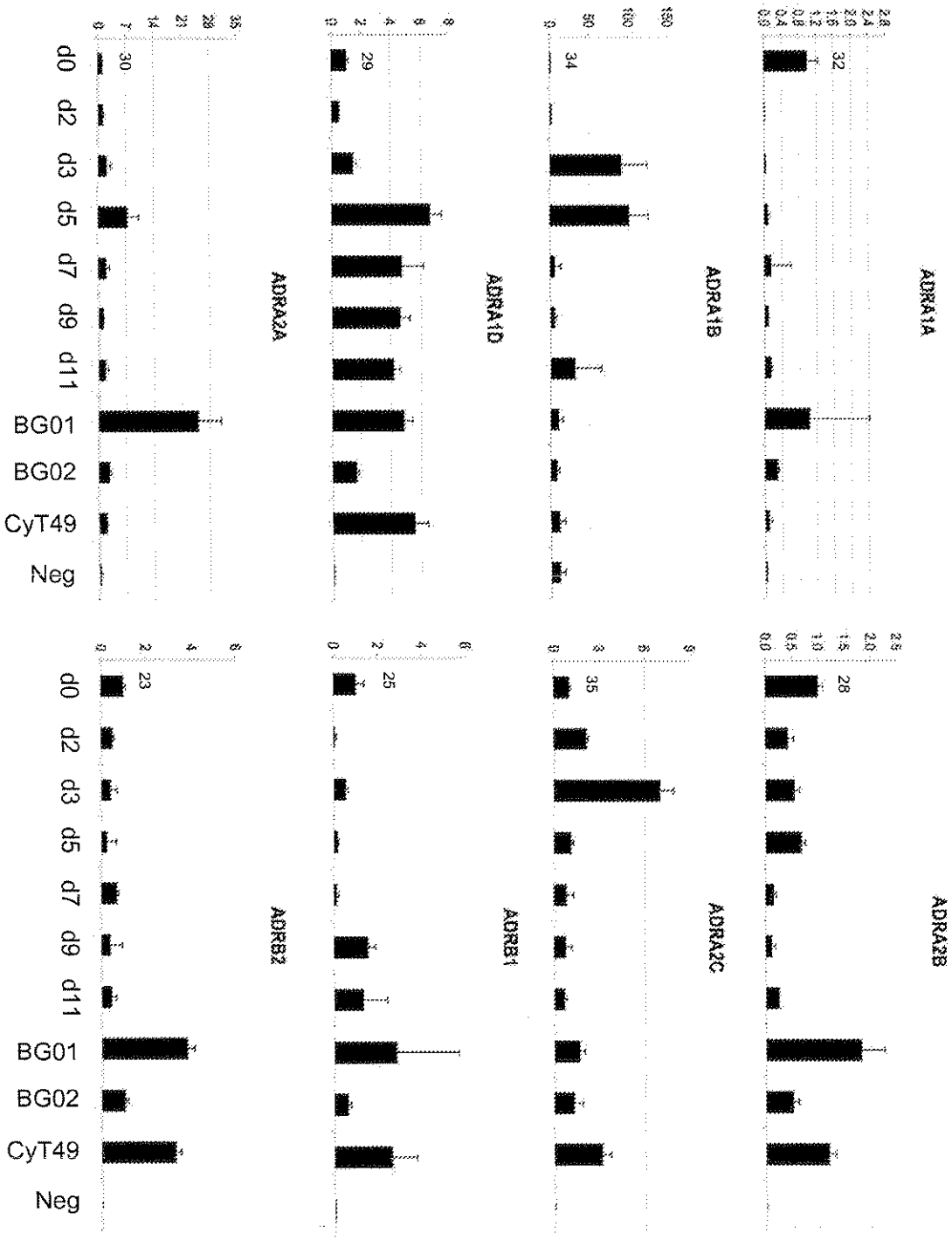
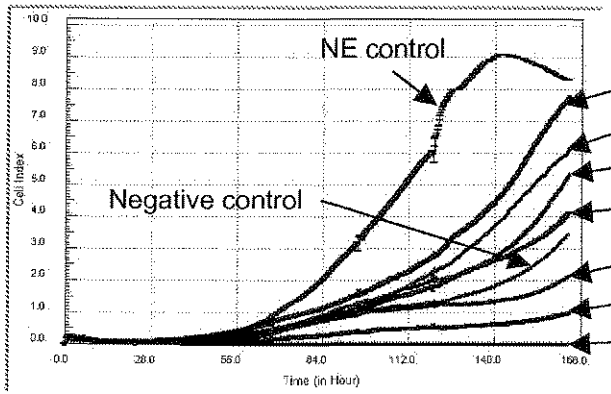

ADRA1A
ADRA1B
ADRA1D
ADRA2A
ADRA2B
ADRA2C
ADRB1
ADRB2
d0
d2
d3
d5
d7
d9
d11
BG01
BG02
CyT49
Neg

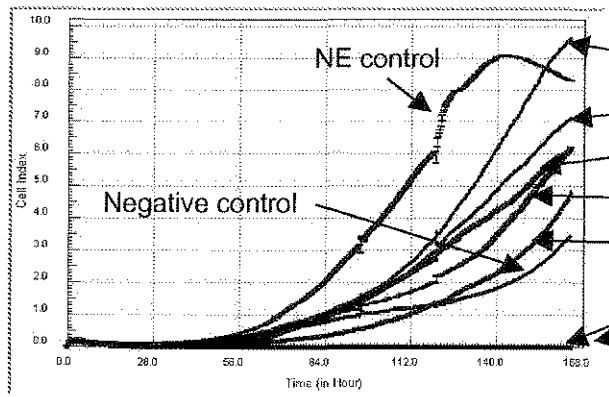
Figure 16

Alpha-Adrenoceptor Inhibitors



Name	Action	Selectivity	Description
Yohimbine hydrochloride	Ant.	α2	α2-Adrenoceptor antagonist isolated from Cortnanthe johimbe
Chloroethylclonidine dihydrochloride	Ant.	α1B	Irreversible α1B-adrenoceptor alkylating agent
Fenspiride hydrochloride	Ant.	α	α-Adrenoceptor antagonist; NSAID
Fiduxosin hydrochloride	Ant.	α1	α1-Adrenoceptor antagonist
L-765,314	Ant.	α1B	Potent, selective α1B adrenoceptor antagonist.
Benoxathian hydrochloride	Ant.	α1	Selective α1 adrenoceptor antagonist
Prazosin hydrochloride	Ant.	α1	Peripheral α1 adrenoceptor antagonist

Beta-Adrenoceptor Inhibitors



Name	Action	Selectivity	Description
(±)-Propranolol hydrochloride	Ant.	β1	β– Adrenoceptor antagonist
(S)-Propranolol hydrochloride	Blk.	β	Active β-adrenoceptor receptor blocking enantiomer
(S)-(-)-propafenone hydrochloride	Blk.	β	β-Adrenoceptor blocker
(±)-Metoprolol (+)-tartrate	Ant.	β1	β1-Adrenoceptor antagonist
Labetalol hydrochloride	Ant.	β	Competitive β-adrenoceptor antagonist
CGP 20712A methanesulfonate	Ant.	β1	Selective β1-adrenoceptor antagonist
Bromoacetyl alprenolol menthane	Ant.	β	Alkylating β-adrenoceptor antagonist

Figure 17